

PF-0590 USN

<110> INCYTE GENOMICS, INC.; YUE, Henry  
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GUEGLER, Karl J.; BAUGHN, Mariah R.  
LU, Dyung Aina M.; TANG, Y. Tom

<120> MEMBRANE-ASSOCIATED ORGANIZATIONAL PROTEINS

<130> PF-0590 USN

<140> 09/787,677

<141> To Be Assigned

<150> PCT/US99/22082

<151> 1999-09-23

<150> US 60/172,228

<151> 1999-05-04

<150> US 60/155,251

<151> 1998-10-13

<150> US 60/155,215

<151> 1998-09-25

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<213> Homo sapiens

<220>

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<223> Incyte ID No: 2687924CD1

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Asn	Val	Tyr	Arg	Ile	Ile	Ser	Ile	Gly	Gly	Ala	Lys	Ala	Ile	Ile
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Asn	Ser	Thr	Val	Thr	Pro	Asn	Met	Thr	Phe	Thr	Lys	Thr	Ser	Gln
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Lys	Phe	Gly	Gln	Trp	Ala	Asp	Ser	Arg	Ala	Asn	Thr	Val	Tyr	Gly
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Leu	Gly	Phe	Ala	Ser	Glu	Gln	His	Leu	Thr	Gln	Phe	Ala	Glu	Lys
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Phe	Gln	Glu	Val	Lys	Glu	Ala	Ala	Arg	Leu	Ala	Arg	Glu	Lys	Ser
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Gln	Asp	Gly	Gly	Glu	Leu	Thr	Ser	Pro	Ala	Leu	Gly	Leu	Ala	Ser
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His	Gln	Val	Pro	Pro	Ser	Pro	Leu	Val	Ser	Ala	Asn	Gly	Pro	Gly
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Glu	Glu	Lys	Leu	Phe	Arg	Ser	Gln	Ser	Ala	Asp	Ala	Pro	Gly	Pro

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Gly Glu Val Gln Trp Glu Ala Glu Phe	Phe Ala Leu Gln Asp Ser				
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Asn Asn Lys Leu Ala Gly Ala Leu Arg	Glu Ala Asn Ala Ala Ala				
	200		205		210
Ala Gln Trp Arg Gln Gln Leu Glu Ala	Gln Arg Ala Glu Ala Glu				
	215		220		225
Arg Leu Arg Gln Arg Val Ala Glu Leu	Glu Ala Gln Ala Ala Ser				
	230		235		240
Glu Val Thr Pro Thr Gly Glu Lys Glu	Gly Leu Gly Gln Gly Gln				
	245		250		255
Ser Leu Glu Gln Leu Glu Ala Leu Val	Gln Thr Lys Asp Gln Glu				
	260		265		270
Ile Gln Thr Leu Lys Ser Gln Thr Gly	Gly Pro Arg Glu Ala Leu				
	275		280		285
Glu Ala Ala Glu Arg Glu Glu Thr Gln	Gln Lys Val Gln Asp Leu				
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Glu Thr Arg Asn Ala Glu Leu Glu His	Gln Leu Arg Ala Met Glu				
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Arg Ser Leu Glu Glu Ala Arg Ala Glu	Arg Glu Arg Ala Arg Ala				
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Glu Val Gly Arg Ala Ala Gln Leu Leu	Asp Val Arg Leu Phe Glu				
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<220>  
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Gly Glu Gly Ser Leu Gly Cys Gly Ile	Gly Tyr Gly Tyr Leu His		
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Arg Ile Pro Thr Gln Pro Pro Ser Tyr	His Lys Lys Pro Pro Gly		
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Thr Pro Pro Pro Ser Ala Leu Pro Leu	Gly Ala Pro Pro Pro Asp		
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Ala Leu Pro Pro Gly Pro Thr Pro Glu	Asp Ser Pro Ser Leu Glu		
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Thr Gly Ser Arg Gln Ser Asp Tyr Met	Glu Ala Leu Leu Gln Ala		
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Pro Gly Ser Ser Met Glu Asp Pro Leu	Pro Gly Pro Gly Ser Pro		
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Ser His Ser Ala Pro Asp Pro Asp Gly	Leu Pro His Phe Met Glu		

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Thr Pro Leu Gln Pro Pro Pro Pro Val Gln Arg Val Met Asp Pro					
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Gly Phe Leu Asp Val Ser Gly Ile Ser Leu Leu Asp Asn Ser Asn					
	170		175		180
Ala Ser Val Trp Pro Ser Leu Pro Ser Ser Thr Glu Leu Thr Thr					
	185		190		195
Thr Ala Val Ser Thr Ser Gly Pro Glu Asp Ile Cys Ser Ser Ser					
	200		205		210
Ser Ser His Glu Arg Gly Gly Glu Ala Thr Trp Ser Gly Ser Glu					
	215		220		225
Phe Glu Val Ser Phe Leu Asp Ser Pro Gly Ala Gln Ala Gln Ala					
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Asp His Leu Pro Gln Leu Thr Leu Pro Asp Ser Leu Thr Ser Ala					
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Ala Ser Pro Glu Asp Gly Leu Ser Ala Glu Leu Leu Glu Ala Gln					
	260		265		270
Ala Glu Glu Glu Pro Ala Ser Thr Glu Gly Leu Asp Thr Gly Thr					
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Glu Ala Glu Gly Leu Asp Ser Gln Ala Gln Ile Ser Thr Thr Glu					
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<213> Homo sapiens

<220>

<221> misc\_feature

<223> Incyte ID No: 2594049CD1

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Phe Ser Lys Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly					
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Ile Thr Gln Cys Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala					
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Asp Ile Gln Ala Ala Gln Ala Met Met Val Thr Ser Ser Ala Ile					
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Ser Ser Leu Ala Cys Ile Ile Ser Val Val Gly Met Arg Cys Thr					
	95		100		105
Val Phe Cys Gln Glu Ser Arg Ala Lys Asp Arg Val Ala Val Ala					
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Gly Gly Val Phe Phe Ile Leu Gly Gly Leu Leu Gly Phe Ile Pro					
	125		130		135
Val Ala Trp Asn Leu His Gly Ile Leu Arg Asp Phe Tyr Ser Pro					
	140		145		150
Leu Val Pro Asp Ser Met Lys Phe Glu Ile Gly Glu Ala Leu Tyr					
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Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile Ala Gly Ile Ile					
	170		175		180
Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser Asn Tyr Tyr					
	185		190		195

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Pro	Gly	Gln	Pro	Pro	Lys	Val	Lys	Ser	Glu	Phe	Asn	Ser	Tyr	Ser
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<211> 292

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Incyte ID No: 5139028CD1

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Pro	Val	Gln	Ala	Thr	Ala	Ile	Ser	Pro	Pro	Pro	Val	Leu	Tyr	Pro
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Asn	Leu	Ala	Glu	Leu	Glu	Asn	Tyr	Met	Gly	Leu	Ser	Leu	Ser	Ser
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Gln	Glu	Val	Gln	Glu	Ser	Leu	Leu	Gln	Ile	Pro	Glu	Gly	Asp	Ser
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Thr	Ala	Val	Ser	Gly	Pro	Gly	Pro	Gly	Gln	Met	Val	Ala	Pro	Val
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Thr	Gly	Tyr	Ser	Leu	Gly	Val	Arg	Arg	Ala	Glu	Ile	Lys	Pro	Gly
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Val	Arg	Glu	Ile	His	Leu	Cys	Lys	Asp	Glu	Arg	Gly	Lys	Thr	Gly
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Leu	Arg	Leu	Arg	Lys	Val	Asp	Gln	Gly	Leu	Phe	Val	Gln	Leu	Val
			125						130					135
Gln	Ala	Asn	Thr	Pro	Ala	Ser	Leu	Val	Gly	Leu	Arg	Phe	Gly	Asp
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Gln	Leu	Leu	Gln	Ile	Asp	Gly	Arg	Asp	Cys	Ala	Gly	Trp	Ser	Ser
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His	Lys	Ala	His	Gln	Val	Val	Lys	Lys	Ala	Ser	Gly	Asp	Lys	Ile
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Val	Met	Val	Val	Arg	Asp	Arg	Pro	Phe	Gln	Arg	Thr	Val	Thr	Met
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His	Lys	Asp	Ser	Met	Gly	His	Val	Gly	Phe	Val	Ile	Lys	Lys	Gly
			200						205					210
Lys	Ile	Val	Ser	Leu	Val	Lys	Gly	Ser	Ser	Ala	Ala	Cys	Asn	Gly
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Leu	Leu	Thr	Asn	His	Tyr	Val	Cys	Glu	Val	Asp	Gly	Gln	Asn	Val
			230						235					240
Ile	Gly	Leu	Lys	Asp	Lys	Lys	Ile	Met	Glu	Ile	Leu	Ala	Thr	Ala
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Gly	Asn	Val	Val	Thr	Leu	Thr	Ile	Ile	Pro	Ser	Val	Ile	Tyr	Glu
			260						265					270
His	Met	Val	Lys	Lys	Leu	Pro	Pro	Val	Leu	Leu	His	His	Thr	Met
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<211> 1501

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Incyte ID No: 2687924CB1

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<212> DNA

<213> Homo sapiens

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<221> misc\_feature

<223> Incyte ID No: 1320134CB1

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<212> DNA

<213> Homo sapiens

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<223> Incyte ID No: 2594049CB1

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<211> 1473

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Incyte ID No: 5139028CB1

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<210> 9

<211> 189

<212> PRT

<213> Rattus norvegicus

<220>

<221> misc\_feature

<223> GenBank ID No: g1913909

<400> 9

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Asn	Ser	Thr	Ile	Thr	Pro	Asn	Met	Thr	Phe	Thr	Lys	Thr	Ser	Gln	
				65					70					75	
Lys	Phe	Gly	Gln	Trp	Ala	Asp	Ser	Arg	Ala	Asn	Thr	Val	Tyr	Gly	
				80					85					90	
Leu	Gly	Phe	Ser	Ser	Glu	His	His	Leu	Ser	Lys	Phe	Ala	Glu	Lys	
				95					100					105	
Phe	Gln	Glu	Phe	Lys	Glu	Ala	Ala	Arg	Leu	Ala	Lys	Glu	Lys	Ser	
				110					115					120	
Gln	Glu	Lys	Met	Glu	Leu	Thr	Ser	Thr	Pro	Ser	Gln	Glu	Ser	Ala	
				125					130					135	
Gly	Gly	Asp	Leu	Gln	Ser	Pro	Leu	Thr	Pro	Glu	Ser	Ile	Asn	Gly	
				140					145					150	
Thr	Asp	Asp	Glu	Arg	Thr	Pro	Asp	Val	Thr	Gln	Asn	Ser	Glu	Pro	
				155					160					165	
Arg	Ala	Glu	Pro	Ala	Gln	Asn	Ala	Leu	Pro	Phe	Ser	His	Arg	Tyr	
				170					175					180	
Thr	Phe	Asn	Ser	Ala	Ile	Met	Ile	Lys							
				185											

<210> 10  
 <211> 451  
 <212> PRT  
 <213> Rattus norvegicus

<220>  
 <221> misc\_feature  
 <223> GenBank ID No: g4432587

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Met	Gly	Leu	Gly	Ala	Ser	Ser	Glu	Gln	Pro	Ala	Gly	Gly	Glu	Gly	
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Phe	His	Leu	His	Gly	Val	Gln	Glu	Asn	Ser	Pro	Ala	Gln	Gln	Ala	
				20					25					30	
Gly	Leu	Glu	Pro	Tyr	Phe	Asp	Phe	Ile	Ile	Thr	Ile	Gly	His	Ser	
				35					40					45	
Arg	Leu	Asn	Lys	Glu	Asn	Asp	Thr	Leu	Lys	Ala	Leu	Leu	Lys	Ala	
				50					55					60	
Asn	Val	Glu	Lys	Pro	Val	Lys	Leu	Glu	Val	Phe	Asn	Met	Lys	Thr	
				65					70					75	
Met	Arg	Val	Arg	Glu	Val	Glu	Val	Val	Pro	Ser	Asn	Met	Trp	Gly	
				80					85					90	
Gly	Gln	Gly	Leu	Leu	Gly	Ala	Ser	Val	Arg	Phe	Cys	Ser	Phe	Arg	
				95					100					105	
Arg	Ala	Ser	Glu	His	Val	Trp	His	Val	Leu	Asp	Val	Glu	Pro	Ser	
				110					115					120	
Ser	Pro	Ala	Ala	Leu	Ala	Gly	Leu	Arg	Pro	Tyr	Thr	Asp	Tyr	Ile	
				125					130					135	
Val	Gly	Ser	Asp	Gln	Ile	Leu	Gln	Glu	Ser	Glu	Asp	Phe	Phe	Thr	
				140					145					150	
Leu	Ile	Glu	Ser	His	Glu	Gly	Lys	Pro	Leu	Lys	Leu	Met	Val	Tyr	
				155					160					165	



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Asn	Ser	Glu	Ser	Asp	Ser	Cys	Arg	Glu	Val	Thr	Val	Thr	Pro	Asn	
				170					175					180	
Ala	Ala	Trp	Gly	Gly	Glu	Gly	Ser	Leu	Gly	Cys	Gly	Ile	Gly	Tyr	
				185					190					195	
Gly	Tyr	Leu	His	Arg	Ile	Pro	Thr	Gln	Pro	Ser	Ser	Gln	Tyr	Lys	
				200					205					210	
Lys	Pro	Pro	Ser	Ala	Ser	Ser	Pro	Gly	Thr	Pro	Ala	Lys	Thr	Pro	
				215					220					225	
Gln	Pro	Asn	Ala	Phe	Pro	Leu	Gly	Ala	Pro	Pro	Pro	Trp	Pro	Ile	
				230					235					240	
Pro	Gln	Asp	Ser	Ser	Gly	Pro	Glu	Leu	Gly	Ser	Arg	Gln	Ser	Asp	
				245					250					255	
Tyr	Met	Glu	Ala	Leu	Pro	Gln	Val	Pro	Gly	Gly	Phe	Met	Glu	Glu	
				260					265					270	
Gln	Leu	Pro	Gly	Pro	Gly	Ser	Pro	Gly	His	Gly	Thr	Ala	Asp	Tyr	
				275					280					285	
Gly	Gly	Cys	Leu	His	Ser	Met	Glu	Ile	Pro	Leu	Gln	Pro	Pro	Pro	
				290					295					300	
Pro	Val	Gln	Arg	Val	Met	Asp	Pro	Gly	Phe	Leu	Asp	Val	Ser	Gly	
				305					310					315	
Met	Ser	Leu	Leu	Asp	Ser	Asn	Asn	Thr	Ser	Val	Cys	Pro	Ser	Leu	
				320					325					330	
Ser	Ser	Ser	Ser	Leu	Leu	Thr	Pro	Thr	Ala	Val	Ser	Ala	Leu	Gly	
				335					340					345	
Pro	Glu	Asp	Ile	Gly	Ser	Ser	Ser	Ser	Ser	His	Glu	Arg	Gly	Gly	
				350					355					360	
Glu	Ala	Thr	Trp	Ser	Gly	Ser	Glu	Phe	Glu	Ile	Ser	Phe	Pro	Asp	
				365					370					375	
Ser	Pro	Gly	Ser	Gln	Ala	Gln	Val	Asp	His	Leu	Pro	Arg	Leu	Thr	
				380					385					390	
Leu	Pro	Asp	Gly	Leu	Thr	Ser	Ala	Ala	Ser	Pro	Glu	Glu	Gly	Leu	
				395					400					405	
Ser	Ala	Glu	Leu	Leu	Glu	Ala	Gln	Thr	Glu	Glu	Pro	Ala	His	Thr	
				410					415					420	
Ala	Ser	Leu	Asp	Cys	Met	Ala	Gln	Thr	Glu	Gly	Pro	Ala	Gly	Gln	
				425					430					435	
Val	Gln	Ala	Ala	Pro	Asp	Pro	Glu	Pro	Gly	Leu	Cys	Glu	Gly	Pro	
				440					445					450	
Trp															

<210> 11

<211> 230

<212> PRT

<213> Mus musculus

<220>

<221> misc\_feature

<223> GenBank ID No: g3335184

<400> 11

Met	Ala	Ser	Leu	Gly	Val	Gln	Leu	Val	Gly	Tyr	Ile	Leu	Gly	Leu	
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Leu	Gly	Leu	Leu	Gly	Thr	Ser	Ile	Ala	Met	Leu	Leu	Pro	Asn	Trp	
				20					25					30	
Arg	Thr	Ser	Ser	Tyr	Val	Gly	Ala	Ser	Ile	Val	Thr	Ala	Val	Gly	
				35					40					45	
Phe	Ser	Lys	Gly	Leu	Trp	Met	Glu	Cys	Ala	Thr	His	Ser	Thr	Gly	
				50					55					60	

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Ile	Thr	Gln	Cys	Asp	Ile	Tyr	Ser	Thr	Leu	Leu	Gly	Leu	Pro	Ala	
				65					70						75
Asp	Ile	Gln	Ala	Ala	Gln	Ala	Met	Met	Val	Thr	Ser	Ser	Ala	Met	
				80					85						90
Ser	Ser	Leu	Ala	Cys	Ile	Ile	Ser	Val	Val	Gly	Met	Arg	Cys	Thr	
				95					100						105
Val	Phe	Cys	Gln	Asp	Ser	Arg	Ala	Lys	Asp	Arg	Val	Ala	Val	Val	
				110					115						120
Gly	Gly	Val	Phe	Phe	Ile	Leu	Gly	Gly	Ile	Leu	Gly	Phe	Ile	Pro	
				125					130						135
Val	Ala	Trp	Asn	Leu	His	Gly	Ile	Leu	Arg	Asp	Phe	Tyr	Ser	Pro	
				140					145						150
Leu	Val	Pro	Asp	Ser	Met	Lys	Phe	Glu	Ile	Gly	Glu	Ala	Leu	Tyr	
				155					160						165
Leu	Gly	Ile	Ile	Ser	Ala	Leu	Phe	Ser	Leu	Val	Ala	Gly	Val	Ile	
				170					175						180
Leu	Cys	Phe	Ser	Cys	Ser	Pro	Gln	Gly	Asn	Arg	Thr	Asn	Tyr	Tyr	
				185					190						195
Asp	Gly	Tyr	Gln	Ala	Gln	Pro	Leu	Ala	Thr	Arg	Ser	Ser	Pro	Arg	
				200					205						210
Ser	Ala	Gln	Gln	Pro	Lys	Ala	Lys	Ser	Glu	Phe	Asn	Ser	Tyr	Ser	
				215					220						225
Leu	Thr	Gly	Tyr	Val											
				230											

<210> 12

<211> 298

<212> PRT

<213> Mus musculus

<220>

<221> misc\_feature

<223> GenBank ID No: g3342560

<400> 12

Met	Ser	Leu	Tyr	Pro	Ser	Leu	Glu	Asp	Leu	Lys	Val	Asp	Lys	Val	
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Ile	Gln	Ala	Gln	Thr	Ala	Tyr	Ser	Ala	Asn	Pro	Ala	Ser	Gln	Ala	
				20					25						30
Phe	Val	Leu	Val	Asp	Ala	Ser	Ala	Ala	Leu	Pro	Pro	Asp	Gly	Asn	
				35					40						45
Leu	Tyr	Pro	Lys	Leu	Tyr	Pro	Glu	Leu	Ser	Gln	Tyr	Met	Gly	Leu	
				50					55						60
Ser	Leu	Asn	Glu	Ala	Glu	Ile	Cys	Glu	Ser	Met	Pro	Met	Val	Ser	
				65					70						75
Gly	Ala	Pro	Ala	Gln	Gly	Leu	Val	Ala	Arg	Pro	Ser	Ser	Val	Asn	
				80					85						90
Tyr	Met	Val	Ala	Pro	Val	Thr	Gly	Asn	Asp	Ala	Gly	Ile	Arg	Arg	
				95					100						105
Ala	Glu	Ile	Lys	Gln	Gly	Ile	Arg	Glu	Val	Ile	Leu	Cys	Lys	Asp	
				110					115						120
Gln	Asp	Gly	Lys	Ile	Gly	Leu	Arg	Leu	Lys	Ser	Ile	Asp	Asn	Gly	
				125					130						135
Ile	Phe	Val	Gln	Leu	Val	Gln	Ala	Asn	Ser	Pro	Ala	Ser	Leu	Val	
				140					145						150
Gly	Leu	Arg	Phe	Gly	Asp	Gln	Val	Leu	Gln	Ile	Asn	Gly	Glu	Asn	
				155					160						165

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Cys	Ala	Gly	Trp	Ser	Ser	Asp	Lys	Ala	His	Lys	Val	Leu	Lys	Gln	
				170					175					180	
Ala	Phe	Gly	Glu	Lys	Ile	Thr	Met	Thr	Ile	Arg	Asp	Arg	Pro	Phe	
				185					190					195	
Glu	Arg	Thr	Val	Ile	Met	His	Lys	Asp	Ser	Ser	Gly	His	Val	Gly	
				200					205					210	
Phe	Ile	Phe	Lys	Ser	Gly	Lys	Ile	Thr	Ser	Ile	Val	Lys	Asp	Ser	
				215					220					225	
Ser	Ala	Ala	Arg	Asn	Gly	Leu	Leu	Thr	Asp	His	His	Ile	Cys	Glu	
				230					235					240	
Ile	Asn	Gly	Gln	Asn	Val	Ile	Gly	Leu	Lys	Asp	Ala	Gln	Ile	Ala	
				245					250					255	
Asp	Ile	Leu	Ser	Thr	Ala	Gly	Thr	Val	Val	Thr	Ile	Thr	Ile	Met	
				260					265					270	
Pro	Thr	Phe	Ile	Phe	Glu	His	Ile	Ile	Lys	Arg	Met	Ala	Pro	Ser	
				275					280					285	
Ile	Met	Lys	Ser	Leu	Met	Asp	His	Thr	Ile	Pro	Glu	Val			
				290					295						